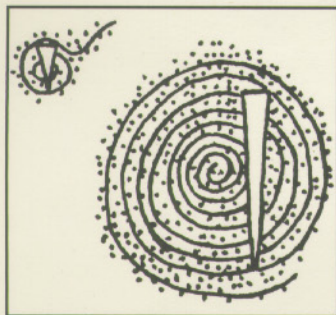
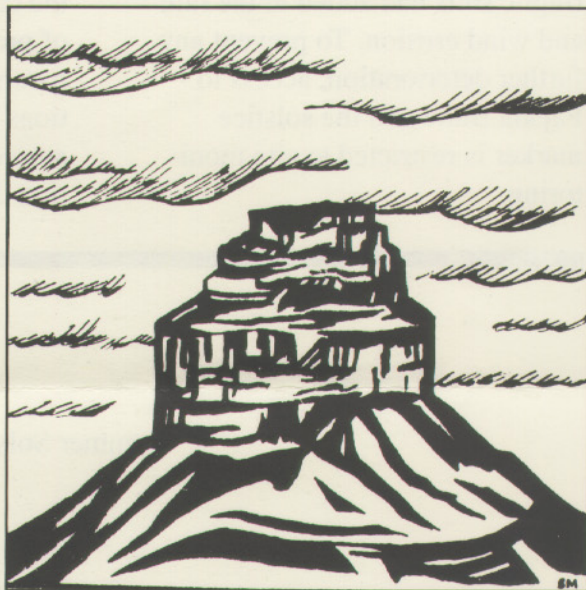
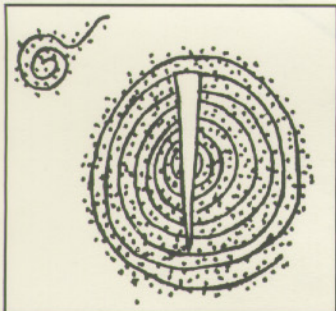


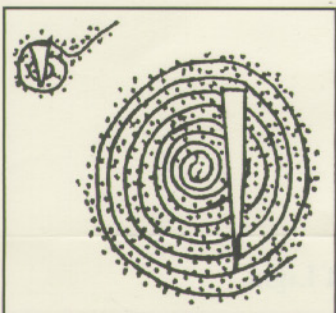
FAJADA BUTTE SOLSTICE MARKER



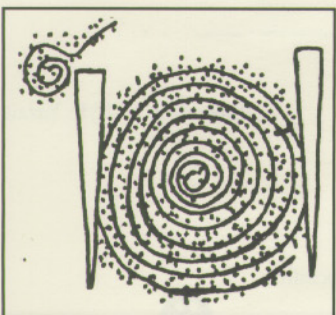
Spring Equinox



Summer Solstice



Autumnal Equinox



Winter Solstice

Fajada (banded) Butte is a dominant landmark in the canyon that creates an imposing presence as it rises over three hundred feet from the canyon floor. On a cliff face near the top of this butte, three large upright rock slabs stand in front of two spiral petroglyphs that were carved by the Chaco Anasazi. As sunlight passes through these slabs on the spring and fall equinoxes and the winter and summer solstices, dagger-shaped beams of light appear at various points on the spirals. This planned interplay of light and shadow appears to have functioned as a calendrical marker for the prehistoric pueblo people of Chaco.

Modern southwestern pueblo cultures believe the solstices are crucial to their societies' ceremonial and agricultural needs. They have solar and lunar sky watchers who announce the seasons by monitoring the cycles of the sun and the moon. The sun appears to hesitate for a few days at the solstices before it changes direction. In winter, the pueblo people have ceremonies to encourage the sun to move back toward the north so that the days will again become longer. This is a very important time of year, for it signifies renewal.

The people of Chaco incorporated a variety of solar orientations into their architecture and art, such as

the Fajada Butte solstice marker. These alignments indicate that the ancestral pueblo people possessed a well-developed knowledge of astronomy and its relationship to the seasons, and this knowledge played an important role in their lives.

The "Three Slab Site" of Fajada Butte was recognized as a solstice marker in 1977. Once identified and publicized, visitation to the site increased. Unfortunately this visitation threatened the stability of the marker and the other sites on the butte. To ensure preservation and provide protection for these fragile archeological resources, the National Park Service restricted access to Fajada in 1982.

On summer solstice 1989, it was discovered that two of the three rock slabs had shifted. These shifts affected the shafts of light that were projected on the spirals. Off-center and irregular patterns of light are now created on the spirals instead of the centered "daggers" that were recorded when it was first observed. Following this discovery, an evaluation team studied the site to determine the causes of deterioration. It was concluded that even though access had been restricted, human impact accelerated the normal erosion process causing the slabs to shift. Boot soles grinding on the soft sand-

stone, foot traffic disturbing plant cover, and paths worn into the fragile soils had added to the rain and wind erosion. To prevent any further deterioration, access to Fajada Butte and the solstice marker is restricted to site monitoring.

Fajada Butte, like all sites in Chaco, holds important clues to the cultural past. The importance of preserving these sites is paramount so that future generations can continue to search for answers to questions this generation does not yet know how to ask.

If we all take responsibility for these resources, they will be here for the education and enjoyment of future generations.

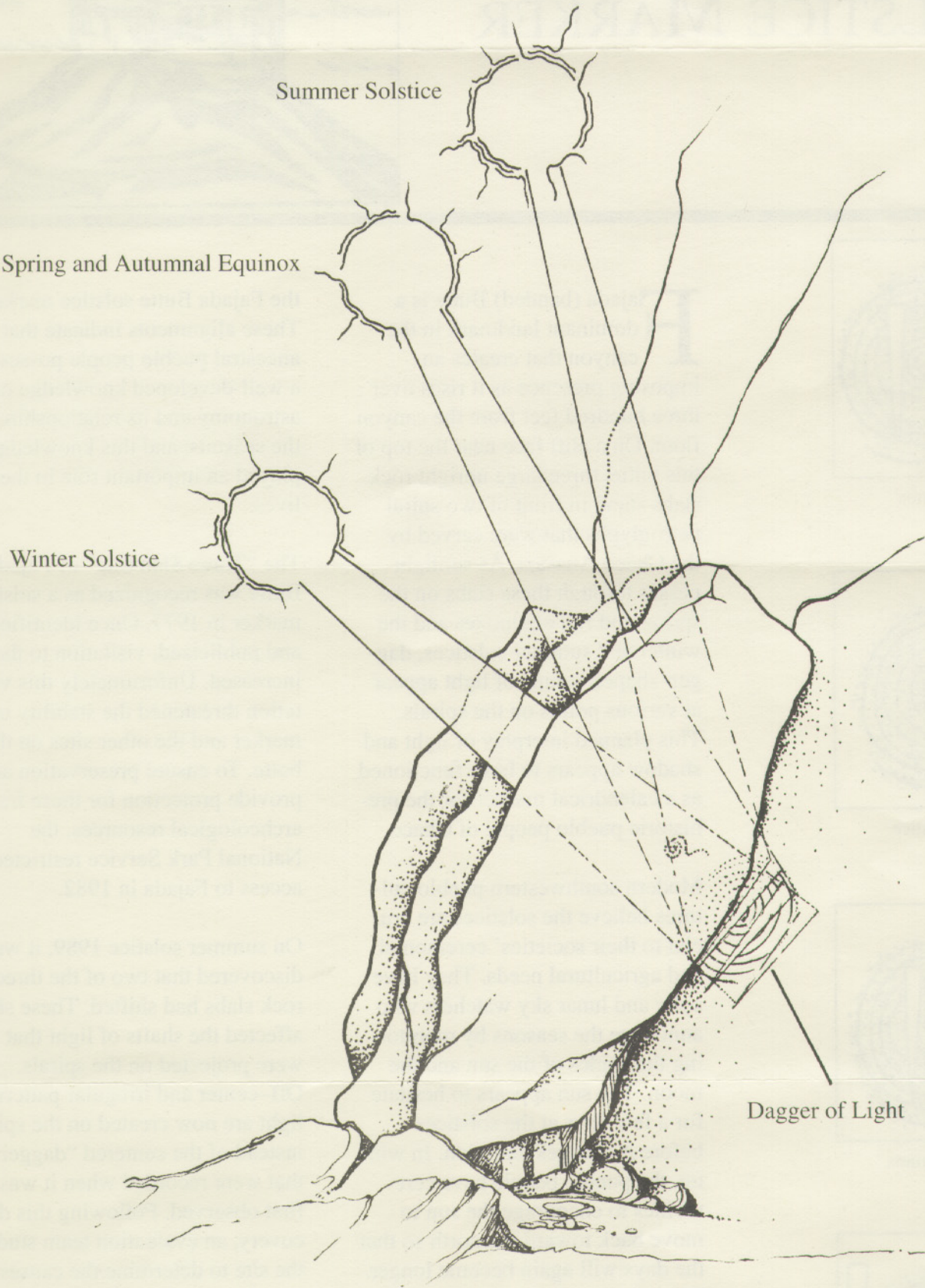


Illustration by Lyle Yazzie

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